IN THE CLAIMS:

1. (Currently Amended) A semiconductor device comprising:

a substrate;

a first thin film transistor having a first active layer comprising $Si_{1-X}Ge_X$ where $0 < X < 1$ formed over said substrate; and

a second thin film transistor having a second active layer comprising silicon formed over said substrate wherein said second active layer is not intentionally ~~doped~~ added with germanium,

wherein the first active layer and the second active layer are formed on a same insulating surface over the substrate.

2. (Previously Presented) A semiconductor device comprising:

a substrate;

a first thin film transistor having a first active layer comprising $Si_{1-X}Ge_X$ where $0 < X < 1$ formed over said substrate; and

a second thin film transistor having a second active layer comprising silicon formed over said substrate, wherein said second active layer contains no germanium,

wherein the first active layer and the second active layer are formed on a same insulating surface over the substrate, and

wherein said first thin film transistor constitutes a CMOS circuit.

3. (Canceled)

4. (Original) A semiconductor device according to claim 1, wherein said $Si_{1-X}Ge_X$ is polycrystalline silicon germanium and said silicon is polysilicon.

5. (Original) A semiconductor device according to claim 2, wherein said $Si_{1-X}Ge_X$ is polycrystalline silicon germanium and said silicon is polysilicon.

6. (Canceled)

7. (Original) A semiconductor device according to claim 1, wherein said $Si_{1-X}Ge_X$ is polycrystalline silicon germanium and said silicon is amorphous silicon.

8. (Original) A semiconductor device according to claim 2, wherein said $Si_{1-X}Ge_X$ is polycrystalline silicon germanium and said silicon is amorphous silicon.

9. (Canceled)

10. (Original) A semiconductor device according to claim 1, wherein said first active layer further includes nickel at a concentration of 1×10^{15} to 1×10^{16} atoms/cm^3.

11. (Original) A semiconductor device according to claim 2, wherein said first active layer further includes nickel at a concentration of 1×10^{15} to 1×10^{16} atoms/cm^3.

12. (Canceled)

13. (Previously Presented) A semiconductor device according to claim 1 wherein said semiconductor device is selected from the group consisting of a handy phone, a video camera, a mobile computer, a head-mount display, a rear-type projector and a front-type projector.

14. (Previously Presented) A semiconductor device according to claim 2 wherein said semiconductor device is selected from the group consisting of a handy phone, a video camera, a mobile computer, a head-mount display, a rear-type projector and a front-type projector.

15-29. (Canceled)

30. (Previously Presented) A semiconductor device having an active matrix type display device, said display device comprising:

a substrate having an insulating surface;

a plurality of pixel electrodes arranged in a matrix formed over said substrate;

a plurality of first thin film transistors for switching said pixel electrodes and formed over said substrate;

a driver circuit formed over said substrate for driving said plurality of first thin film transistors, said driver circuit comprising at least one second thin film transistor;

each of said first thin film transistors and said second thin film transistor comprising:

semiconductor film comprising silicon and including at least one channel region;

a gate insulating film adjacent to said channel region; and

a gate electrode adjacent to said gate insulating film,

wherein the semiconductor film of each of said first thin film transistors and said second thin film transistor are formed on the substrate having the insulating surface, and

wherein the semiconductor film of said second thin film transistor contains germanium at a higher concentration than the semiconductor film of said first thin film transistors and the semiconductor film of the first thin film transistors is not intentionally added with germanium.

31. (Previously Presented) The semiconductor device according to claim 30 wherein the semiconductor film of said plurality of first thin film transistors is not added with

germanium while the semiconductor film of said second thin film transistor is added with germanium.

32. (Previously Presented) A semiconductor device according to claim 30 wherein said semiconductor device is selected from the group consisting of a handy phone, a video camera, a mobile computer, a head-mount display, a rear-type projector and a front-type projector.

33. (Previously Presented) A semiconductor device comprising:

a substrate having an insulating surface;

a first thin film transistor formed over said substrate, said first thin film transistor comprising:

a first semiconductor film comprising crystalline silicon formed over said substrate and having a channel region;

a first gate insulating film adjacent to said first semiconductor film; and

a first gate electrode adjacent to said first gate insulating film;

a second thin film transistor formed over said substrate, said second thin film transistor comprising:

a second semiconductor film comprising crystalline silicon formed over said substrate and having a channel region;

a second gate insulating film adjacent to said second semiconductor film; and

a second gate electrode adjacent to said second gate insulating film,

wherein the first semiconductor film and the second semiconductor film are formed on the substrate having the insulating surface, and

wherein said first semiconductor film contains germanium at a higher

concentration than said second semiconductor film and the second semiconductor film is not intentionally added with germanium.

34. (Previously Presented) The semiconductor device according to claim 33 wherein said first semiconductor film is added with germanium while the second semiconductor film is not intentionally added with germanium.

35. (Previously Presented) A semiconductor device according to claim 33 wherein said semiconductor device is selected from the group consisting of a handy phone, a video camera, a mobile computer, a head-mount display, a rear-type projector and a front-type projector.

36. (Previously Presented) A semiconductor device comprising:

a substrate having an insulating surface;

a first thin film transistor formed over said substrate, said first thin film transistor comprising:

a first semiconductor film comprising crystalline silicon formed over said substrate and having a channel region;

a first gate insulating film adjacent to said first semiconductor film; and

a first gate electrode adjacent to said first gate insulating film;

a second thin film transistor formed over said substrate, said second thin film transistor comprising:

a second semiconductor film comprising amorphous silicon formed over said substrate and having a channel region;

a second gate insulating film adjacent to said second semiconductor film; and

a second gate electrode adjacent to said second gate insulating film,

wherein the first semiconductor film and the second semiconductor film are formed on the substrate having the insulating surface, and

wherein said first semiconductor film contains germanium at a higher concentration than said second semiconductor film and the second semiconductor film is not intentionally added with germanium.

37. (Previously Presented) The semiconductor device according to claim 36 wherein said first semiconductor film is added with germanium while the second semiconductor film is not intentionally added with germanium.

38. (Previously Presented) A semiconductor device according to claim 36 wherein said semiconductor device is selected from the group consisting of a handy phone, a video camera, a mobile computer, a head-mount display, a rear-type projector and a front-type projector.

39. (Previously Presented) The semiconductor device according to claim 1 wherein the first active layer further comprises a metal selected from the group consisting of nickel, iron, cobalt, and platinum.

40. (Previously Presented) The semiconductor device according to claim 2 wherein the first active layer further comprises a metal selected from the group consisting of nickel, iron, cobalt, and platinum.

41. (Previously Presented) The semiconductor device according to claim 30 wherein the semiconductor film of the second thin film transistor comprises a metal selected from the group consisting of nickel, iron, cobalt, and platinum.

42. (Previously Presented) The semiconductor device according to claim 33 wherein the first semiconductor film further comprises a metal selected from the group consisting

of nickel, iron, cobalt, and platinum.

43. (Canceled)

44. (Previously Presented) The semiconductor device according to claim 1 wherein each of the first active layer and the second active layer further comprises a metal selected from the group consisting of nickel, iron, cobalt and platinum.

45. (Previously Presented) The semiconductor device according to claim 2 wherein each of the first active layer and the second active layer further comprises a metal selected from the group consisting of nickel, iron, cobalt and platinum.

46. (Previously Presented) The semiconductor device according to claim 30 wherein each of the semiconductor films of the first and second thin film transistors further comprises a metal selected from the group consisting of nickel, iron, cobalt and platinum.

47. (Previously Presented) The semiconductor device according to claim 30 wherein each of the first and second semiconductor films further comprises a metal selected from the group consisting of nickel, iron, cobalt and platinum.

48. (Canceled)

49. (Previously Presented) A semiconductor device comprising:

a substrate;

a underlying layer formed over the substrate;

a first thin film transistor having a first active layer comprising $Si_{1-X}Ge_X$ where $0 < X < 1$ formed over said underlying layer; and

a second thin film transistor having a second active layer comprising silicon formed over said underlying layer wherein said second active layer is not intentionally doped with germanium,

wherein the first active layer and the second active layer are formed on a same insulating surface over the substrate.

50. (Previously Presented) The semiconductor device according to claim 49 wherein the underlying film is silico oxide.

51. (Previously Presented) A semiconductor device comprising:

a substrate;

a first thin film transistor having a first active layer comprising $Si_{1-X}Ge_X$ where $0 < X < 1$ formed over said substrate; and

a second thin film transistor having a second active layer comprising silicon formed over said substrate wherein said second active layer is not intentionally doped with germanium,

wherein the first active layer and the second active layer are formed on a same insulating surface over the substrate,

wherein the first active layer and the second active layer include a metal capable of promoting crystallization of silicon, and

wherein said $Si_{1-X}Ge_X$ is polycrystalline silicon germanium and said silicon is polycrystalline silicon.

52. (Currently Amended) A semiconductor device comprising:

a substrate having an insulating surface;

a first thin film transistor formed over said substrate, said first thin film transistor comprising:

a first semiconductor film comprising crystalline silicon formed over said substrate and having a channel region;

a first gate insulating film adjacent to said first semiconductor film; and

a first gate electrode adjacent to said first gate insulating film;

a second thin film transistor formed over said substrate, said second thin film transistor comprising:

a second semiconductor film comprising crystalline silicon formed over said substrate and having a channel region;

a second gate insulating film adjacent to said second semiconductor film; and

a second gate electrode adjacent to said second gate insulating film,

wherein the first semiconductor film and the second semiconductor film are formed on the substrate having the insulating surface, and

wherein the first semiconductor film and the second semiconductor film include a metal capable of promoting crystallization of silicon,

~~wherein said $Si_{1-x}Ge_x$ is polycrystalline silicon germanium and said silicon is polycrystalline silicon, and~~

wherein said first semiconductor film contains germanium at a higher concentration than said second semiconductor film and the second semiconductor film is not intentionally added with germanium.

53. (Previously Presented) A semiconductor device according to claim 51 wherein said semiconductor device is selected from the group consisting of a handy phone, a video camera, a mobile computer, a head-mount display, a rear-type projector and a front-type projector.

54. (Previously Presented) A semiconductor device according to claim 52 wherein said semiconductor device is selected from the group consisting of a handy phone, a video

camera, a mobile computer, a head-mount display, a rear-type projector and a front-type projector.

55. (Previously Presented) The semiconductor device according to claim 51 wherein the metal is selected from the group consisting of nickel, iron, cobalt, and platinum.

56. (Previously Presented) The semiconductor device according to claim 52 wherein the metal is selected from the group consisting of nickel, iron, cobalt, and platinum.